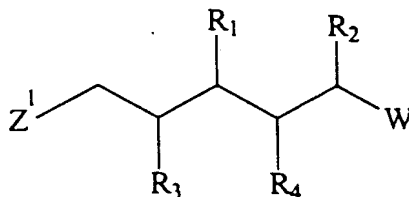


Antibiotic polyketide compounds are provided having the formula

10



15

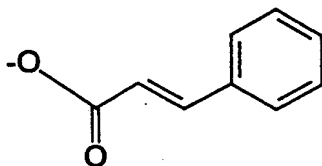
wherein:

R₁ and R₂ are the same or different and are independently H or R;

- TOO11
- 20 R is a structural fragment having a saturated or unsaturated linear, branched, or cyclic, skeleton containing one to ten carbon atoms in which the carbon atoms may be optionally substituted with a substituent selected from the group consisting of: -OH; =O; -OR₅; -O₂CR₅; -SH; -SR₅; -SOCR₅; -NH₂; -NHR₅; -NH(R₅)₂; -NHCOR₅; NRCOR₅; -I; -Br; -Cl; -F; -CN; -CO₂H; -CO₂R₅; -CHO; -COR₅; -CONH₂; -CONHR₅; 25 -CON(R₅)₂; -COSH; -COSR₅; -NO₂; -SO₃H; -SOR₅; and -SO₂R₅, wherein R₅ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group;

R₃ and R₄ are different and are independently selected from the groups consisting of OH,

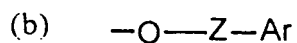
(a)



30

5

and



wherein,

10 Z^1 and Z are linear or branched, saturated or unsaturated, one to ten carbon fragments optionally substituted with Y;

Ar is a monocyclic, bicyclic or tricyclic, fully or partially aromatic system containing five or six membered carbocyclic or, oxygen, nitrogen or sulphur containing heterocyclic rings, optionally substituted with R or Y;

15

Y is selected from the group consisting of: H; =O, -OH; -OR; -O₂CR; -SH; -SR; -SO₂CR; -NH₂; -NHR; -NH(R)₂; -NHCOR; NRCOR; -I; -Br; -Cl; -F; -CN; -CO₂H; -CO₂R; -CHO; -COR; -CONH₂; -CONHR; -CON(R)₂; -COSH; -COSR; -NO₂; -SO₃H; -SOR; -SO₂R; and, -O- (epoxide);

20

W is H or R;

with the provisos that when W is H, R₂ is not H; when R₂ is CH₃, W is not n-propyl; and, one of R₃ and R₄ is (a) or (b) and another of R₃ and R₄ is OH.

2